

I CLAIM:

1. A machine-readable storage medium storing executable code and configured to cause a machine to randomly alter a shape of a character.
2. The machine-readable storage medium as in claim 1, wherein said medium is configured to cause said machine to perform the following steps:
  - providing a first shaped character;
  - providing a predetermined frequency distribution; and
  - randomly altering a shape of said first shaped character according at least partially to said frequency distribution.
3. The machine-readable storage medium as in claim 1, wherein said medium is configured to cause said machine to perform the following steps:
  - providing a handwriting font comprising a plurality of shaped characters, wherein said plurality of shaped characters comprises a first shaped character comprising a plurality of elements, wherein said plurality of elements comprises a first element comprising a plurality of dimensionable features, wherein said plurality of dimensionable features comprises a first dimensionable feature comprising one of: a length, a height, a width, a line width, an arc length, a radius of curvature, and an angular orientation;
  - providing a first frequency distribution of dimensions for said first dimensionable feature;
  - randomly selecting a number;
  - choosing a dimension for said first dimensionable feature based at least on said first frequency distribution and said randomly selected number; and
  - creating an image of said first shaped character having said first element having said first dimensionable feature having said dimension.
4. The machine-readable storage medium as in claim 1, wherein said medium is configured to cause said machine to perform the following steps:

measuring a dimension of a first dimensionable feature of each of a plurality of handwritten instances of a first shaped character, so as to create a plurality of dimensions corresponding to said first dimensionable feature of said plurality of handwritten instances of said first shaped character;

creating a first frequency distribution for said first dimensionable feature of said first shaped character based at least in part on said plurality of dimensions; and

randomly altering a shape of said first shaped character according at least partially to said first frequency distribution.

5. A method for creating a dynamic handwriting font, comprising:  
providing a first shaped character;  
providing a predetermined frequency distribution; and  
randomly altering a shape of said first shaped character according at least partially to said frequency distribution.

6. The method as in claim 5, further comprising randomly selecting a number, wherein said randomly altering comprises randomly altering said shape of said first shaped character according at least partially to both of said randomly selected number and said frequency distribution.

7. The method as in claim 5, further comprising providing a handwriting font comprising a plurality of shaped characters, wherein said plurality of shaped characters comprises said first shaped character.

8. The method as in claim 7, wherein said providing a handwriting font comprises: measuring a handwriting written by a person; parsing said handwriting into a plurality of handwritten characters; and creating said handwriting font at least in part from said plurality of handwritten characters.

9. The method as in claim 5, wherein said first shaped character comprises at least two elements, a first of said two elements having a first dimensionable feature and a

second of said two elements having a second dimensionable feature, and wherein said step of randomly altering comprises randomly altering said first dimensionable feature relative to said second dimensionable feature.

10. The method as in claim 9, further comprising smoothing said first shaped character, whereby at least said first element is altered so that said first element is substantially continuous with said second element.

11. The method as in claim 9, wherein said first and second dimensionable features each comprises one of: a length, a height, a width, a line width, an arc length, a radius of curvature, and an angular orientation.

12. The method as in claim 9, further comprising providing at least one predetermined frequency distribution for each of said first and second dimensionable features, wherein said step of randomly altering comprises randomly altering said first dimensionable feature according at least partially to its predetermined frequency distribution and altering said second dimensionable feature according at least partially to its predetermined frequency distribution.

13. The method as in claim 5, comprising:

providing a handwriting font comprising a plurality of shaped characters, wherein said plurality of shaped characters comprises said first shaped character comprising a plurality of elements, wherein said plurality of elements comprises a first element comprising a plurality of dimensionable features, wherein said plurality of dimensionable features comprises a first dimensionable feature comprising one of: a length, a height, a width, a line width, an arc length, a radius of curvature, and an angular orientation;

providing a first frequency distribution of dimensions for said first dimensionable feature;

randomly selecting a number;

choosing a dimension for said first dimensionable feature based at least on said first frequency distribution and said randomly selected number; and

creating an image of said first shaped character having said first element having said first dimensionable feature having said dimension.

14. The method as in claim 13, wherein each of said plurality of shaped characters comprises a plurality of elements, wherein each of said plurality of elements comprises a plurality of dimensionable features, wherein each of said plurality of dimensionable features comprises one of: a length, a height, a width, a line width, an arc length, a radius of curvature, and an angular orientation, and wherein said method further comprises:

providing a frequency distribution of dimensions for each of said plurality of dimensionable features of said plurality of elements of said plurality of shaped characters;

receiving an instruction to create an image of a first shaped character of said plurality of shaped characters;

randomly selecting a first number;

choosing a first dimension for a first dimensionable feature of a first element of said first shaped character based at least on said randomly selected first number and a first frequency distribution provided for said first dimensionable feature; and

creating an image of said first shaped character having said first element having said first dimensionable feature having said first dimension.

15. The method as in claim 14, further comprising:

randomly selecting a number for each dimensionable feature for each element of said first shaped character;

choosing a dimension for each said dimensionable feature of each said element of said first shaped character based at least on said randomly selected number for said each said dimensionable feature and said frequency distribution provided for said each said dimensionable feature; and

creating an image of said first shaped character having each said dimensionable feature having said dimension for said each said dimensionable feature.

16. The method as in claim 13, further comprising: providing a second frequency distribution of dimensions, different from said first frequency distribution, for said first

dimensionable feature; and choosing between said first and second frequency distributions based at least in part on a context of said first shaped character.

17. The method as in claim 13, wherein said creating said image comprises smoothing said first shaped character, whereby at least one of said plurality of elements is altered so that said at least one of said plurality of elements is substantially continuous with an adjacent element.

18. A method for creating a dynamic handwriting font, comprising:  
measuring a dimension of a first dimensionable feature of each of a plurality of handwritten instances of a first shaped character, so as to create a plurality of dimensions corresponding to said first dimensionable feature of said plurality of handwritten instances of said first shaped character; and  
creating a first frequency distribution for said first dimensionable feature of said first shaped character based at least in part on said plurality of dimensions.

19. The method as in claim 18, further comprising randomly altering a shape of said first shaped character according at least partially to said first frequency distribution.

20. The method as in claim 18, wherein said measuring comprises:  
reading an input of a handwriting written by a person;  
parsing said handwriting into a plurality of shaped characters comprising said first shaped character;  
for each shaped character, grouping handwritten instances of said each shaped character;  
parsing said first shaped character into a plurality of elements comprising a first element, said first element having said first dimensionable feature; and  
measuring said a dimension of said first dimensionable feature of each of said grouped handwritten instances of said first shaped character.

21. The method as in claim 20, wherein said plurality of elements comprises a second element having a second dimensionable feature, and wherein the method further comprises:

measuring a dimension of said second dimensionable feature of each of said grouped handwritten instances of said first shaped character;

creating a second frequency distribution for said second dimensionable feature of said first shaped character based at least in part on said plurality of dimensions;

selecting said first shaped character based at least in part on an input by a user;  
and

randomly altering said first dimensionable feature of said first shaped character based at least in part on said first frequency distribution, and randomly altering said second dimensionable feature of said first shaped character based at least in part on said second frequency distribution, wherein said first dimensionable feature is altered relative to said second dimensionable feature.